

IN THE CLAIMS:

1. (Currently amended) A method of adhesive bonding comprising:
 - providing an adherend;
 - providing a substrate;
 - providing [a] an ultraviolet photocurable adhesive composition containing an ultraviolet photocurable adhesive and an effective amount of microspheres that do not essentially change a cure speed of said ultraviolet photocurable adhesive;
 - contacting said adherend and said substrate with said photocurable adhesive composition ~~containing an adhesive and an effective amount of microspheres;~~ and
 - photocuring said adhesive composition to form an at least partially cured adhesive composition whereby said adherend and substrate are bonded together.
2. (Original) The method of claim 1 wherein said photocuring includes exposing said adhesive composition to an effective dose of ultraviolet radiation for a predetermined time.
3. (Original) The method of claim 2 wherein said dose is 40 - 120 J/cm².
4. (Original) The method of claim 3 wherein said dose is 90 - 110 J/cm².
5. (Original) The method of claim 1 wherein said at least partially cured adhesive composition is at least 90% fully cured.

PATENT
AMENDMENT

6. (Original) The method of claim 5 wherein said at least partially cured adhesive composition is at least 95% fully cured.
7. (Original) The method of claim 1 wherein said microspheres of a ceramic material.
8. (Original) The method of claim 7 wherein said microspheres are solid substantially throughout their volume.
9. (Original) The method of claim 8 wherein the diameters of said microspheres are about 40 microns or less.
10. (Original) The method of claim 1 wherein said effective amount is about 35 - 75 wt.% of said adhesive composition.
11. (Original) The method of claim 10 wherein said effective amount is about 60 - 65 wt.% of said adhesive composition.
12. (Original) The method of claim 1 wherein said microspheres are made from silicate.
13. (Original) The method of claim 12 wherein said silicate is an alumino-silicate.
14. (Original) The method of claim 13 wherein said alumino-silicate is an alkali alumino-silicate.

PATENT
AMENDMENT

15. (Original) The method of claim 1 wherein the adhesive composition is a pseudoplastic material.
16. (Original) The method of claim 1 wherein the thermal coefficient of expansion of the adhesive composition in the photocured state is less than that of said adhesive in the photocured state.
17. (Currently amended) A method of adhesive bonding comprising:
 - providing an adherend;
 - providing a substrate;
 - providing [a] an ultraviolet photocurable adhesive composition containing an ultraviolet photocurable adhesive and microspheres that do not essentially change a cure speed of said ultraviolet photocurable adhesive;
 - extruding said ultraviolet photocurable adhesive composition onto at least one of said adherend and said substrate;
 - pressing said adherend and said substrate together with said ultraviolet photocurable adhesive composition therebetween; and
 - photocuring said ultraviolet photocurable adhesive composition to form an at least partially cured adhesive composition whereby said adherend and substrate are bonded together.
18. (Currently amended) A method of adhesive bonding comprising:
 - providing an adherend;
 - providing a substrate;
 - providing [a] an ultraviolet photocurable adhesive composition containing an ultraviolet photocurable adhesive and microspheres that do not essentially change a cure speed of the

ultraviolet photocurable adhesive, said ultraviolet photocurable adhesive being a pseudoplastic flow material;

flowing said ultraviolet photocurable adhesive composition onto at least one of said adherend and said substrate;

pressing said adherend and said substrate together with said ultraviolet photocurable adhesive composition therebetween; and

photocuring said ultraviolet photocurable adhesive composition to form an at least partially cured adhesive composition whereby said adherend and substrate are bonded together.

19. (New) The method of claim 14 wherein said alkali alumino-silicate does not contain lithium.

20. (New) The method of claim 19 wherein said alkali alumino-silicate consists of one or more substances selected from the group consisting of: SiO_2 ; Al_2O_3 ; Fe_2O_3 ; CaO ; Na_2O ; K_2O ; and MgO .